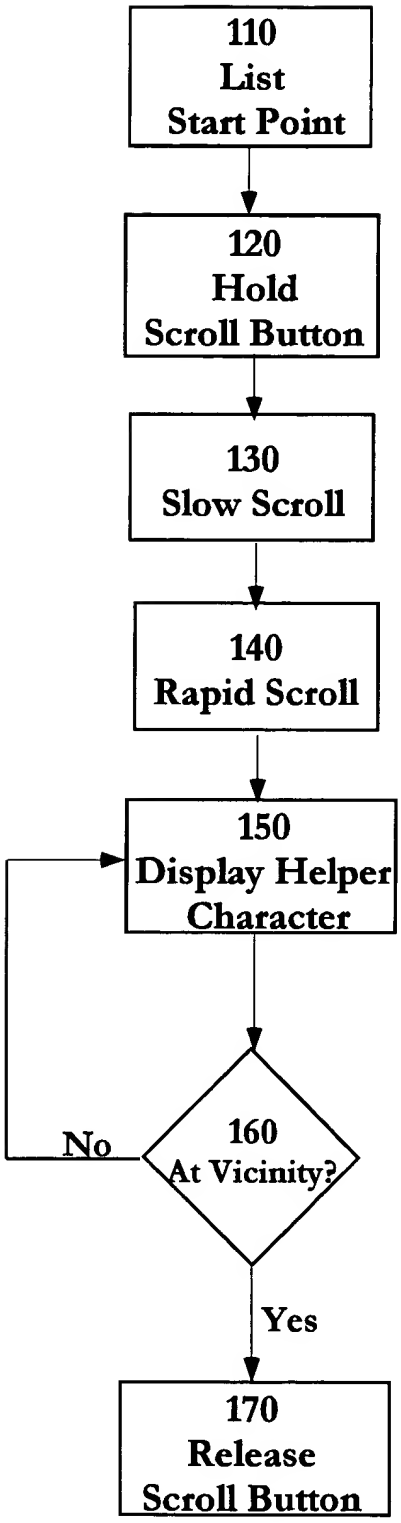
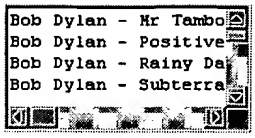
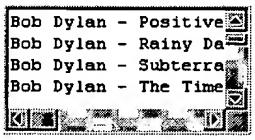

110
List
Start Point
120
Hold
Scroll Button
130
Slow Scroll
140
Rapid Scroll
150
Display Helper
Character
160
At Vicinity?
No
Yes
170
Release
Scroll Button
100

FIG. 1



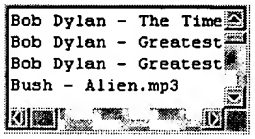
210

User starts at som point in th list



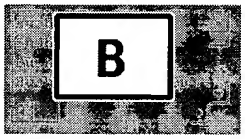
220

Scrolling starts off slow (one line per second)



230

But soon speeds, so it is difficult to read the entries as they pass by

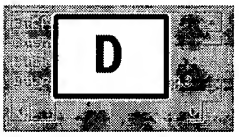


240

Large "helper" letter replaces list

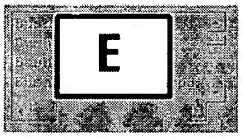
241

This now increments at a rate of approximately 1/second...



242

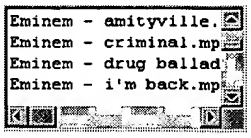
as long as the user holds down the scroll button



243

When the user reaches the vicinity of interest they release the scroll button

200



244

Th list of entries r turns to th screen

FIG. 2

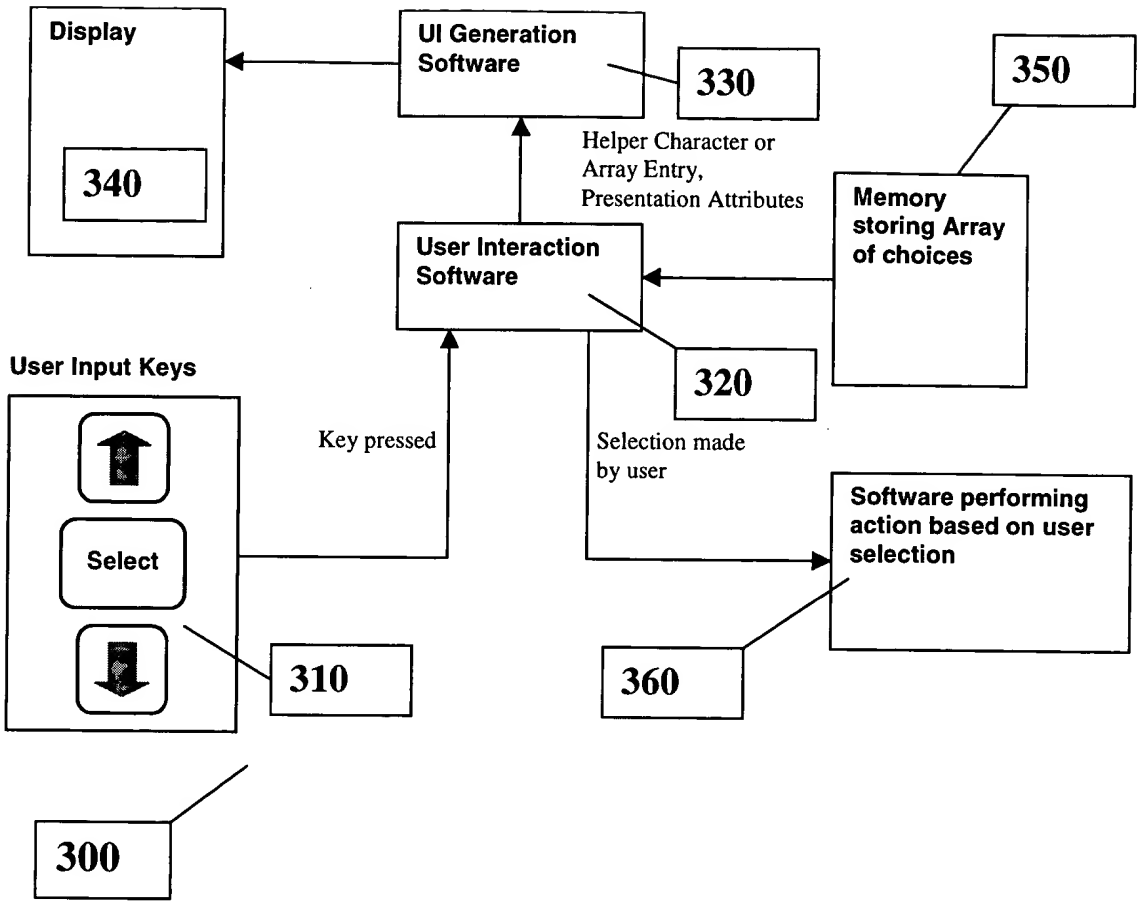

Display
340
UI Generation Software
330
350
Helper Character or Array Entry, Presentation Attributes
Memory storing Array of choices
User Interaction Software
320
User Input Keys
Key pressed
Selection made by user
Select
Software performing action based on user selection
310
360
300

FIG. 3

```
***    Pseudo C Code    ***
if (ScrollButtonPressed)
{
      if (ButtonPressed == BUTTON_UP)
      {
            DirectionOfScroll = SCROLL_UP;
      }
      else
      {
            DirectionOfScroll = SCROLL_DOWN;
      }
      if (ButtonPressDuration < T1)
      {
            ScrollStyle = SLOW;
      }
      else if (ButtonPressDuration >= T1)
      {
            ScrollStyle = FAST;
      }
      else if (ButtonPressDuration >= T2)
      {
            ScrollStyle = HELPER;
      }
}
else // Scroll Button Not Pressed
{
      ScrollStyle = NONE;
}
if (ScrollStyle == SLOW)
{
      wait(SlowScrollDelayLength);
      MovePointerInArray(DirectionOfScroll);
      DisplayNewArrayEntry;
}
if (ScrollStyle == FAST)
{
      wait(FastScrollDelayLength);
      MovePointerInArray(DirectionOfScroll);
      DisplayNewArrayEntry;
}
if (ScrollStyle == HELPER)
{
      wait(HelperScrollDelayLength);
      ChangeHelperCharacter(DirectionOfScroll);
      DisplayNewHelperCharacter;
}
*** Pseudo C Code End ***
```

400

420

430

410

FIG. 4